George Mason University College of Education and Human Development School of Sport, Recreation, and Tourism Management

SRST 623 001– Research Design and Statistical Reasoning 3 Credits, Fall 2021

Meeting times/place: Online W 4:30 pm -7:10 pm synchronous

Face-2-Face W 4:30 pm – 7:10 pm, Horizon Hall 1009

Faculty

Name: Dr. Chris Green
Office Hours: by appointment
Office Phone: (703) 993-5371
Email Address: bgreen21@gmu.edu

Prerequisites/Corequisites

Graduate standing

University Catalog Course Description

Introduces basic principles of scientific and scholarly inquiry in Sport and Recreation Studies. Explores the logic and practice of methods and techniques employed in research related to sport and recreation.

Course Overview

This course prepares students with the knowledge and skills needed to conduct basic or applied research within academia and in their current or future professions.

Course Delivery Method

This course will be delivered using a hybrid format. This course will be delivered approximately 50% face-to-face and 50% online using a synchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a microphone for use with the Blackboard Collaborate web conferencing tool.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download: [Add or delete options, as desire.]
 - Adobe Acrobat Reader: https://get.adobe.com/reader/
 - Windows Media Player: https://support.microsoft.com/en-us/help/14209/get-windows-media-player
 - o Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- <u>Course Week:</u> Our course week will begin on Wednesday with our in-person class meeting.
- <u>Log-in Frequency:</u>

Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least [3] times per week. In addition, students must log-in for all scheduled online synchronous meetings.

• Participation:

Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

• Technical Competence:

Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.

• Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

• Workload:

Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

• <u>Instructor Support:</u>

Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. You can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

• Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

• Accommodations:

Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

- 1. Demonstrate appropriate use of research terminology and application of basic concepts and principles associated with scientific research;
- 2. Critically evaluate published research in scientific journals and the popular press;
- 3. Demonstrate the use of research methodologies and designs employed in SRST research;
- 4. Apply critical thinking and research findings in SRST practice;
- 5. Use descriptive and inferential statistics in analyzing research data; and
- 6. Prepare a sound and feasible research proposal.

Professional Standards Courses offered in the Sport and Recreation Studies (SRST) graduate program are guided by the principles of the Commission of Sport Management Accreditation (COSMA). COSMA (2010, p. 1) "bases its accrediting process on principles, rather than standards.")

The eight recommended principles are:

- outcomes assessment;
- strategic planning;
- curriculum;
- faculty;
- scholarly and professional activities;
- resources:
- internal and external relationships; and
- educational innovation.

For more information, please see:

Commission of Sport Management Accreditation. (2010, June). *Accreditation principles and self study preparation*. Retrieved August 18, 2014 from http://cosmaweb.org/accredmanuals

Required Texts

- *Neuman, W. L. (2014). Social research methods: Qualitative and quantitative approaches (7th Ed.). Essex: Pearson Education.
- *Sekaran, U. (2003). Research methods for business: A skill-building approach. New York: Wiley & Sons.
- Pallant, J. (2016). SPSS survival manual: A step by step guide to data analysis using IBM SPSS (6th ed.). Columbus, OH: McGraw-Hill Education. Also available online.

Additional readings, web exercises, and videos will be required throughout the semester and will be available on Blackboard (mymason.gmu.edu.).

Recommended Resources

- Pallant, J. (2016). SPSS survival manual: A step by step guide to data analysis using IBM SPSS (6th ed.). Columbus, OH: McGraw-Hill Education. Also available online.
- American Psychological Association. (2020). *Publication Manual of the American Psychological Association* (7th ed.). Washington, DC: American Psychological Association.
- Scribbr (n.d.). Home [YouTube Channel]. Retrieved from https://www.youtube.com/c/Scribbr-us/featured

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Via).

Assignments will be due at the time and date specified. No late work is accepted in this course.

You have three days after a graded assignment or exam has been returned to contact the professor to contest the grade. After three days, only the content of the graded assignment or exam can be discussed.

^{*}These texts are offered free via Creative Commons and can be downloaded from the course Blackboard site.

Assignments and/or Examinations

Human Subjects Online Ethics Training: Students will be asked to complete Mandatory Training for Persons Conducting Research Using Human Subjects. Information is available online: http://research.gmu.edu/ORSP/HumanTraining.html

The training takes between two and five hours and can be accessed from: http://www.citiprogram.org. Copy and paste your completion certificate into a word document or save as a PDF, then upload a copy of the certificate file to Blackboard.

Critique of One Empirical Research Article: Students will write a critique of one study obtained from a peer- reviewed journal. The critique should include the following parts: purpose, methods, results, and critical comments as well as your reflections about the article (see Blackboard site for specific instructions).

Research Proposal: Students will write a proposal in APA style for a research project focusing on a topic of interest. Students should utilize a methodological approach that most appropriately addresses their research question(s). See APA manual for an example of an APA style paper. The proposal should include:

- 1. Background and statement of the problem.
- 2. Literature review to orient the reader to your topic and theoretical framework.
- 3. Statement of purpose, rationale, and justification for the study, research questions, and hypotheses where appropriate.
- 4. Method

Research design

Participants and Sampling procedure

Data sources (dependent variables); instrumentation (where relevant)

Procedures (proposed data collection process)

Proposed preliminary data analyses

- 5. Initial Results
- 6. Preliminary Implications
- 7. References

Research Power Point Session: Students' research proposals will be presented in a virtual poster session. Place a copy of the slide on Blackboard for comment.

In-class Assignments, Participation, and Attendance Policy: Students will be asked to work individually or in groups of 2-3 students for in-class and online assignments throughout the semester (see assignments on Blackboard). Because of the importance of lecture, discussion, and engagement with course material to your total learning experience, I encourage you to both attend and participate in face-to-face and online class sessions regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. These elements will reflect the professional attitude implied in the course goals and will account for 20% of your course grade. With reference to the grading scale described later in this syllabus, you will note that this percentage is equivalent to two full letter grades. Students who must miss a class must notify the instructor in advance to earn full points.

Course Evaluation

Other Requirements

- Regular attendance is expected. It enhances your academic success to be in every scheduled session.
- Class participation is extremely important, but obviously, it is quality, not quantity that counts. We can all learn from each other. It is expected that when you have some special knowledge or relevant experience you will contribute it to the learning of the other members of the class. Useful contributions, as you know, come in many forms. Sometimes a question or a brief comment can be as or more useful to the learning of the class as a long presentation. Even your mistakes and misunderstandings can lead to learning opportunities for us all. Please speak up in all class sessions.

Grading

This course will be graded on a points basis, with possible points.

A	=	B+	=	C	=
A-	=	В	=	F	= 0 -
		B-	=		

Professional Dispositions

See https://cehd.gmu.edu/students/polices-procedures/

Students are expected to exhibit professional behaviors and dispositions at all times.

Always come to class with a positive attitude and try to have fun as you learn about yourself, others, and the topic at hand! Much of the value of the course will be generated from in-class activities and discussion. As such, you are asked to prepare for discussion by reading assigned items (prior to class) and actively participate in the conversation.

I expect you to uphold the highest ethical standards and academic integrity. This includes refraining from cheating, fabrication, and plagiarism.

Virtual classrooms can make it difficult to connect with others. Please do your best to be visible to your classmates by turning on your video. One day, we will actually see one another in person. It will be nice to be familiar with one another beforehand.

Class Schedule - Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Intro	Wk1: 8.25	Intro to research and the class	In person	
Module 1	Wk2: 9.1	What do you want to know?	In person	
		Background & Problem, RQ, Justification		
	Wk3: 9.8	Informing your research	Virtual	
		How to find literature to understand	Small groups	
		what we already know.		
		Using theory to frame your research		
Module 2	Wk4: 9.15	How to read & critique literature	In person	
Informing		Summarizing research		
your research		Citing research using APA		
	Wk5: 9.22	Mapping literature	Virtual	
		Relationships and gaps	Asynchronous	
		Writing lit review	with drop-ins	
Module 3	Wk6: 9.29	Participants and Sampling	In person	
Data		Quantitative Research Design		
collection	Wk7: 10.6	Quantitative Data Collection Techniques	Virtual	
		Measurement, reliability, and validity	synchronous	
	Wk8: 10:13	Qualitative Research Design	In person	
	Wk9: 10:20	Qualitative Data Collection Techniques	Virtual	
			synchronous	
Module 4	Wk10: 10:27	Preparing your quantitative data for	In person	
Data analysis		analysis		
		Quant: Descriptive analyses		
	Wk11: 11.3	Quant: Examining Differences	Virtual	
			Small groups	
	Wk12: 11.10	Quant: Relationships & Association	Virtual	
			Small groups	
	Wk13: 11.17	Coding Methods for Qualitative Data	In person	

	Wk14: 11:24	Analysis and Interpretation of	Virtual	
		Qualitative Data	synchronous	
Module 5	Wk15: 12.1	Discussion and Conclusions Telling your story	In person	Research Poster
	Exam Period			Final Proposal due

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: http://cehd.gmu.edu/values/.

GMU Policies and Resources for Students

Policies

- Students must also be fully familiar with the document, "Safe Return to Camus and Remote Learning Guidance for Students Enrolled in CEHD Courses," which is posted as an addendum under the "Syllabus" tab of the course Blackboard site.
- Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).
- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ods.gmu.edu/).

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to https://coursessupport.gmu.edu/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of

Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website $\frac{https://cehd.gmu.edu/students/}{}$.